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IS 15193: 2002

भारतीय मानक

भारी हाईड्रोकार्बन उत्पाद जैसे मिट्टी का तेल, डीज़ल एवं फर्नेस तेल से जुड़े उद्योगों की फ्लोरिंग के लिए पिच-मास्टिक — रीति सहिता

Indian Standard

LAYING OF PITCH-MASTIC FLOORING FOR INDUSTRIES HANDLING HEAVY HYDROCARBON PRODUCTS LIKE KEROSENE, DIESEL AND FURNACE OIL — CODE OF PRACTICE

ICS 91.040.20, 91.100.50

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BUREAU OF INDIAN STANDARDS MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG NEW DELHI 110002 Flooring, Wall Finishing and Roofing Sectional Committee, CED 5

FOREWORD

This Indian Standard was adopted by the Bureau of Indian Standards, after the draft finalized by the Flooring, Wall Finishing and Roofing Sectional Committee had been approved by the Civil Engineering Division Council.

This standard has been formulated with a view to laying down a new specification for pitch-mastic flooring for areas where hydrocarbon products like kerosene, diesel oil, furnace oil are handled.

The composition of the Committee responsible for formulation of this standard is given at Annex A.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2: 1960 'Rules for rounding off numerical values (revised)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

LAYING OF PITCH-MASTIC FLOORING FOR INDUSTRIES HANDLING HEAVY HYDROCARBON PRODUCTS LIKE KEROSENE, DIESEL AND FURNACE OIL — CODE OF PRACTICE

1 SCOPE

This standard lays down the procedure for laying pitchmastic flooring for industries handling kerosene, diesel, furnace oil and other heavy hydrocarbon products.

2 REFERENCE

The following Indian Standard contains provision which through reference in this text, constitutes provision of this standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below:

IS No.

Title

13026:1991

Specification for pitch-mastic flooring for industries handling LPG and other light hydrocarbon products

3 DESIGN CONSIDERATION

Pitch-mastic is jointless and impervious to the transmission or moisture. In designing the pitch-mastic flooring for hydrocarbon services, consideration shall be given to the anticipated service conditions as specified in IS 13026.

4 THICKNESS

The total thickness to which pitch-mastic should be laid shall be 20 to 25 mm or as mutually agreed upon by both parties depending on actual conditions.

5 MATERIAL

- **5.1** Pitch-mastic shall conform to the requirements given in IS 13026.
- 5.2 The pitch-mastic shall be delivered to the site in the molten state and immediately laid.

6 EQUIPMENT

The equipment shall consist of a pitch boiler, a mechanically agitated mastic cooker and other accessories. The equipment shall be used near the site, so as to prevent excessive cooling of the molten material.

7 CONSTRUCTION

7.1 The base on which the pitch-mastic is to be laid shall be stable enough to receive the mastic and to sustain the anticipated load coming on it.

7.2 Preparation of the Base

The base shall have an even and dry surface which has been roughened with stiff brooms or wire or coir brush and shall be free from ridges and hollows. The base may be provided with suitable slope if needed for drainage of rain water, etc.

7.3 Laying

7.3.1 Transport of Molten Material

The molten mastic shall be carried in flat mortar pans. The pans shall be sprinkled with lime stone dust, to prevent stricking of mastic. Grease or oil shall not be used.

7.3.2 Spreading

Pitch-mastic should be laid in bays in one or more layer. The specified thickness be maintained by suitable form work hand tools, gauges, straight edges, band levels, etc.

- 7.3.2.1 The bubbles formed during laying the mastic should be punctured and the depression if any rectified while mastic is hot and plastic.
- 7.3.2.2 Multi-layer work should be treated in the same manner as that of single-layer, care being taken to arrange that the joints in successive layers are staggered.

7.3.2.3 Protection of the surface

The laid surface shall be protected from damage due to movement of heavy loads spillage of oils, etc. Pitchmastic surface should not be used for preparation of cement concrete mixes or mortars.

7.3.2.4 Opening to traffic

The mastic flooring should not be opened to traffic until the material has cooled down to ambient temperature.

8 REPAIRS

Damaged area shall be cut rectangular to the full depth of mastic and replaced with new mastic. Blow lamp techniques to remove damaged portion shall be preferred.

9 MAINTENANCE

The pitch-mastic flooring requires little maintenance. Dirt and dust should be periodically removed with lukewarm water and detergent. Oils, fats and grease spilled over, should be removed immediately.

ANNEX A

(Foreword)

COMMITTEE COMPOSITION

Flooring, Wall Finishing and Roofing Sectional Committee, CED 5

Organization	7
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In personal capacity (A-39/8, DDA Flats, Munirka, New Delhi-110067)

All India Brick & Tile Manufacturers Federation, New Delhi

Bhor Industries Limited, Mumbai

Builder's Association of India, Mumbai

Building Materials and Technology Promotion Council, New Delhi

CEAT Limited, Hyderabad

Central Building Research Institute, Roorkee

Central Public Works Department, New Delhi

Engineer-in-Chief's Branch, Army Headquarters, New Delhi

Hindustan Zinc Limited, Udaipur

India Meteorological Department, New Delhi

In personal capacity (C-474 B, Sushant Lok, Phase I, Gurgaon, Haryana)

In personal capacity (5-9-101/J, Ist floor, Public Garden Road,

Hyderabad-500001, Andhra Pradesh)

Indian Institute of Technology, Kharagpur

Institution of Engineers (India) Limited, Kolkata Maharashtra Engineering Research Institute, Nasik

Ministry of Railways (RDSO), Lucknow

Modern Tiles & Marble, New Delhi

National Test House, Kolkata

Prodorite Anti-Corrosives Limited, Chennai

Projects & Development India Limited, Sindri

Public Works Department, Chennai

Rashtriya Pariyojna Nirman Nigam Limited, New Delhi

Steel Authority of India Limited, Ranchi

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SHRI W. R. TALWAR

SHRI PAWAN TALWAR (Alternate)

SHRI J. SENGUPTA

SHRI S. SUNDRAM

SHRI RAJENDER PAL (Alternate)

Shri Lathika Jaisingh

SHRI S. K. MITTAL (Alternate)

CHIEF ENGINEER (CSQ)

SHRIMATI UPINDER KAUR

SHRIMATI RIVOO MAHINDRU (Alternate)

SHRI C. S. MEHTA

Shri A. V. R. K. Rao

SHRI S. C. GOYAL (Alternate)

SHRI O. P. RATRA

SHRI MUZAFFAR ALI KHAN

Ms Rajni Ahuja

SHRI P. B. VUAY

CHIEF ENGINEER & DIRECTOR

SCIENTIFIC RESEARCH OFFICER (Alternate)

EXECUTIVE ENGINEER (P&D-II)

EXECUTIVE ENGINEER (P&D-I) (Alternate)

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Shri Subhash Kapoor (Alternate)

SHRI D. K. KANUNGO

SHRI R. KAPOOR (Alternate)

Shri M. Annamalai

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SHRI A. K. PAL (Alternate)

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EXECUTIVE ENGINEER (Alternate)

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SHRI B. B. KANWAR (Alternate)

SHRI S. SAH

SHRI RAVICHANDRAM (Alternate)

(Continued from page 3)

Organization

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SHRI S. K. JAIN, Director and Head (Civ Engg) [Representing Director General (Ex-officio)]

Member-Secretary
SHRI R. K. GUPTA
Joint Director (Civ Engg), BIS

Bituminous Flooring, Wall Covering and Roofing Subcommittee, CED 5:5

In personal capacity (B-190, Sector 55, Noida 201301, Uttar Pradesh)

Bharat Petroleum Corporation Limited, Mumbai

Building Materials and Technology Promotion Council, New Delhi

Central Building Research Institute, Roorkee

Central Road Research Institute, New Delhi

Prodorite Anti-Corrosive Limited, Chennai

Engineer-in-Chief's Branch, Army Headquarters, New Delhi

Engineers India Limited, New Delhi

Hindustan Petroleum Corporation Limited, Mumbai

Indian Oil Corporation Limited, New Delhi

Light Roofing Limited, Chennai

Lloyd Insulations (India) Private Limited, New Delhi

S. N. Industries, New Delhi

STP Limited, Kolkata

Wasterwork Chemicals Private Limited, Mumbai

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Review of Indian Standards

Amend No.

Amendments are issued to standards as the need arises on the basis of comments. Standards are also reviewed periodically; a standard along with amendments is reaffirmed when such review indicates that no changes are needed; if the review indicates that changes are needed, it is taken up for revision. Users of Indian Standards should ascertain that they are in possession of the latest amendments or edition by referring to the latest issue of 'BIS Catalogue' and 'Standards: Monthly Additions'.

This Indian Standard has been developed from Doc: No. CED 5 (5198)

Amendments Issued Since Publication

Date of Issue

Amena	Date of issue	Text Affected
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Headquarters	:	
	n, 9 Bahadur Shah Zafar Marg, New Delhi 110 002 323 01 31, 323 33 75, 323 94 02	Telegrams: Manaksanstha (Common to all offices)
Regional Offic	ces:	Telephone
	Manak Bhavan, 9 Bahadur Shah Zafar Marg NEW DELHI 110 002	\[\begin{cases} 323 & 76 & 17 \\ 323 & 38 & 41 \end{cases} \]
	1/14 C.I.T. Scheme VII M, V. I. P. Road, Kankurgachi KOLKATA 700 054	{337 84 99, 337 85 61 337 86 26, 337 91 20
Northern: S	SCO 335-336, Sector 34-A, CHANDIGARH 160 022	$ \begin{cases} 60 38 43 \\ 60 20 25 \end{cases} $
Southern: 0	C.I.T. Campus, IV Cross Road, CHENNAI 600 113	{254 12 16, 254 14 42 254 25 19, 254 13 15
	Manakalaya, E9 MIDC, Marol, Andheri (East) MUMBAI 400 093	\begin{cases} 832 92 95, 832 78 58 \\ 832 78 91, 832 78 92 \end{cases}
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